G. N 1909

20609

Sl. No. 1-19

Application for leave to file a Specification of Invention for Improvements in the means for Separation liquid from Crushed ore, bi-products or other granular materials

Previous references.

1909-10
(Gen Rec)

Gen. File No. 206-09

Serial Nos. 1 — 19

Later references.

1876/06/6
Gen 66-18 Sls 1-4

GENERAL AND REVENUE SECRETARIAT.

Serial Nos. 1 — 19.

Part B. for September 1910.

SUBJECT.

Application for leave to file a Specification of Invention for "Improvements in the means for separating liquid from crushed ore products or other granular materials.

---

1. From Messrs. Dempsey & Co Calcutta.
Letter dated 10.1.1910.

Forwards an application from William Arthur Caldecott, Metallurgist of Consolidated Gold Fields Buildings, Simmond St, Johannesburg Transvaal for leave to file a specification in respect of an invention for "Improvements in the means for separating liquid from Crushed ore products or other granular materials."

G. R. S. 58

2. To the State geologist . .

No. Cy 4025 dated 3.2.10

Forwards for opinion in respect of an invention referred to in Sl. 1.

4. To the officer in charge of P. H. Dy

No. Cy 4027 dated 3.2.10.

with refce to Sl. 1. remits Rs 10/- the appln fee paid by Messrs. Remfry thro on behalf of the applicants.

3. The Deputy of Stamps

No. Cy. 4024 d. 3.2.10.

Forwards with a stamp fee of Re 1. a power of attorney to be duly stamped & returned.

5. From the officer in charge of S. H. Jn

No 279 dated 4.2.10.

Acknowledges the receipt of Rs 10 sent with Sl. 4.

6. From the Deputy of Stamps . .

No 146 dated 5.2.10.

Returns duly stamped the power of attorney sent with Sl. 3. above.

7. To the Deputy of Stamps

No. Cy. 4362 dated 15.2.10.

Acknowledges the receipt of the power of attorney returned duly stamped

8. From the State Geologist. (Sl. 6)

No. 1793 dated 21.2.10.

The invention being found & the claim

G.R.S.11] 1909.-10

GENERAL AND REVENUE SECRETARIAT

(Genl-Mis)

NOTES.

Genl File No. 206/09-0

FILE HEADING.

Invention for "Improvements in means for Separating liquids from crushed ore products or other granular materials"

From

Messrs Remfry and Son, Solicitors & Patent Agents Calcutta

No. Letter Dated 10.1.1910 Received 17.1.1910

Diary No. 2066	Enclos. two Spare Copies	Serial No. 1

BRIEF ABSTRACT OF LETTER.

Forwards an application of William Arthur Caldecott, metallurgist of Consolidated Gold Fields Buildings, Simmons Street, Johannesburg Transvaal, for leave to file a Specification in respect of an invention for "Improvements in means for Separating liquids from Crushed ore products or other granular materials"

NOTES AND ORDERS.

With the above are received a power of attorney and a sum of Rs 11 — (Rs 10 for the application fee & Re 1 for Stamping the power of attorney)

3 drafts are submitted

(Sd) 19/1/1910 VS. 20-1-10.

Notes—First sheet

GPB—30,000—3-4-07.

G. R. S. 12]
General and Revenue Secretariat.

G W File No. 206 of 1909-10

Serial No.	
2.	To. The State Geologist no G 4025 d 3.2.10 Forwards for opinion and report a specification in respect of an invention for "Improvements in means for separating liquid from crushed ore products or other granular materials." referred to in Sl 1.
3 & 4.	Do. The Officer in Ch. of State Stamps no G 4027 d 3.2.10 With reference to Sl 1, remits Rs 10 being the application fee paid by messrs Remfry & Son for the applicants
4 3.	The Supt of Stamps in Nagpur no G 4024 d 3.2.10. Forwards with a stamp duty of Re 1, a power of attorney to be duly stamped and returned.

NOTE—Contn. sheet.

BPG—55,000—27-4-09

G. R. S. 12]
General and Revenue Secretariat.

Gen File No. 206 of 1909-10

Serial No.

5 Fr. the Officer in charge of State Treasury — No 279 d 4.2.10
Acknowledges the receipt of Rs 10 sent with sl 4 above.

6. Fr. the Supdt of Stamps — No 146 d 5.2.10
Returns duly stamped the power of attorney sent with sl 3 above. Serials 5 & 6 are submitted for perusal & acknowledgment re sl 6 is forwd
(Jy 9/2/10)

Issued
CPS 10/2

7. Fr. the Supdt of Stamps in Mysore —
No 4362 d 15.2.10
Acknowledges the power of attorney returned duly stamped with his letter No 146 of 5th inst.

8 From the State Geologist, No 1793 d 21/2/10
States that the invention is in his opinion a novel one & the claims legitimate & recommends for the grant of lease applied for.
Draft order granting the lease applied for is put up — also a D/L letter forwarding the above order to Messrs Remfry & Sons
Submitted
(Jy 23/2/10) VS.
24.

Issued
CPS
25/2

NOTE—Contn. sheet.

GPB—55,000—27-4-09

G. R. S. 12]
General and Revenue Secretariat.

File No. 206 of 1909-10

Serial No.	
9.	Govt order — No G 4567 d 28·2·10 Grants leave to the applicant referred to in Sl 1 to file a specification in question.
10	To Messrs Remfry & Son, Patent Agents & Sols Calcutta — No G 4568 d 28/2/10 forwards for communication to the party Concerned from the above letter &c dated 2·8·10 files the Specification referred to in Sl 9 and forwards 4 Copies of the same with a fee of Rs 30. As usual 4 dfs are submitted for approval the certificate at the foot of the order (Sl 9) both in the draft & fair requires initial and signature respectively. Submitted (Sd) 6·8·10 Approved Sd 8/8/10
12	To the Compiler, Mysore Gazette, No G. 565 d/15·8·10 — Solicits the filing of the Specification referred to in Sl 1.
13	To Messrs Remfry & Son, No G. 966 d/15·8·10 — Forwards Ch for the above Solicitors returns Sl 9 with the Certificate at foot duly filled in & signed.
14.	To Offr in ch of State Stamps Dy, No G. 967 d/15·8·10 — Remits Rs 30/- received with Sl 11.
15	To State Geologist, Chief Engr. & Supdt, Govt Museum, No G. 568-70 d/15·8·10 — Forwards a Copy of the Specification referred to above

NOTE—Contn. sheet.

GPB—55,000—27-4-09

G. R. S. 12]
General and Revenue Secretariat.

Gm File No. 206 of 1909

Serial No.	
16.	From The Offr in charge of the State Hurzn Measurs. — No. 46 dated 17th August 1910. Acknowledges the receipt of Rs 30/- sent with Sl 14.
17.	From The State Geologist in Mysore. No 324 dated 22nd August 1910. — Acknowledges the receipt of the specification sent with Sl 15.
18.	From The Supdt, Govt Museum. No. 60 dated 24th August 1910. Acknowledges the receipt of the Specification sent with Sl 15.
19.	From The Chief Engineer. No 7576 dated 31st August 1910. Acknowledges the receipt of the specification sent with Sl 15.

Subd. The file may now be recorded.

9A 3.9.10 VS

Yes MS 5/9/10

Recd

NOTE—Contn. sheet.

GPB—55,000—27-4-10

By Paper 1911

D2766

To

THE SECRETARY TO THE GOVERNMENT OF ~~INDIA,~~ MYSORE
Genl. & Rev. Departments,
~~DEPARTMENT OF REVENUE AND AGRICULTURE (PATENTS).~~
Bangalore, Mysore.

From

REMFRY & SON,

Solicitors and Patent Agents,

CALCUTTA

Dated Calcutta, 10th Jany 1910.

Sir,

We have the honour to forward herewith an Application of WILLIAM ARTHUR CALDECOTT, Metallurgist, of Consolidated Gold Fields Buildings, Simmonds Street, Johannesburg, Travnsaal, for leave to file a Specification under Part I of the Mysore Inventions & Designs Regulation, 1894, in respect of an Invention for "IMPROVEMENTS IN MEANS FOR SEPARATING LIQUID FROM CRUSHED "ORE PRODUCTS OR OTHER GRANULAR MATERIALS", and solicit the favour of your submitting the same for the orders of His Highness the Dewan of Mysore.

The Power of Attorney under which we are acting is also sent herewith and the prescribed fee of Rs10/- and 1/- for the stamping of such Power is sent by Post Office Order today.

The Applicant has not applied for a Patent in British India.

We have the honour to be,

Sir,

Your very obedient servants,

REMFRY & SON.

per

2)

11/-

Remfry &, Son

W.A.CALDECOTT, Appln fee and stamping P/A.

REMFRY & SON.

[redacted]

RG 18/1/10

Lo Br V for note

RG
18/1/10

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3 & 2

3)

G.R.S. 29A]

190

From

Secy. to the Govt. of His Highness
The Maharaja of Mysore,
Genl. and Rev. Dept.

To

The State Geologist
in Mysore

Dated

Despatched 3-2-10 Bangalore

Received

General No. G 4025

No. G. M 206-09-2

ENCLOSURE NO. 1

---

has the honor to forward for opinion and report, the specification in respect of an invention for "Improvements in means for separating lignes from crushed ore-products or other granular materials" received from Mr. William Arthur Caldecott of Johannesburg, Transvaal

By order

CRs 2/1

for Offg Secy

GPB--10,000—9-4-06.

C. S.
Let the Asst. Commr for
attested the papers under reference.

3 offs

G.R.S. 29A]

190

From

Secy. to the Govt. of His Highness
The Maharaja of Mysore,
Genl. and Rev. Dept.

To

The Superintendent
of Stamps

Dated

Despatched 3.2.10

Received

General No. G6026

No. G. M 206-09-3

ENCLOSURE No. 1 power of attorney & Ltr

has the honor to forward for being duly stamped and returned, a power of attorney executed by Mr. William Arthur Caldecott of Transvaal in favour of messrs Robert Rempfry and Hamilton Greeve Rempfry, of Caldecott to act as his agents in the matter of an invention for improvements in means for separating lignin from crushed

4) Ore products or allied

granular materials

Assam Rule is herewith
sent towards the fee for stamping
the above documents.

BO.

For Mg Secy
VS.

28-1-10

V

C. N. Please see the No. 0 comparison attached to the bottom of the despatch. 3 Offs

money order sent

4/2/10

X

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G.R.S. 29A]

190

From

Secy. to the Govt. of His Highness The Maharaja of Mysore, Genl. and Rev. Dept.

To

The Officer in charge of the State Hazardry Bangalore

Dated

Despatched 3.2.10

Received

General No. G 6027

No. Gm 206-09-4

ENCLOSURE NO. Rs 10 only

Has the honor to remit herewith Rs 10 (ten only) being the fee for an application for leave to file a specification in respect of an invention for "Improvements in means for separating kyanite from crushed ore rock or other granular material" received from Mr. William Arthur Caldecott of Transvaal and to request an acknowledgment in favor of

Offs

28-1-10

GPB--10,000--9-4-06.

Rs 24/1

VS

for Secy

6)

Cm. 206 of 09-10

81 5

No. 275

Received From The Ld

H. H. the Maharaja of Mys

the sum of Rupees Two

application to file a Specifica

for improvement in Licen

Received from Mr. M. Anath

Executive this day by his

H. H. THE MAHARAJA'S STATE HUZUR TREASURY,

BANGALORE 4 February 1910

Exd.

Hd. Acctt. Bakshi.

Power received 5.2.10

Office of the Superintendent of Stamps in Mysore
Bangalore
No. 146 Dated 5th February 1910
Encl. Stamped Power of Attorney

D3171/9

From
C. Chokkanna Esqr B.A.
Superintendent of Stamps
in Mysore

To
C. S. Balasundram Iyer Esqr B.A.
Offg: Secretary to the Government of Mysore
General and Revenue departments

Sir,

With reference to your docket No G.4026/Sm 206-09-3 dated the 3rd instant, I have the honor to return herewith duly Stamped, the Power of attorney received with the above, and to request the favor of an acknowledgment.

I have the honor to be
Sir,
Your most obedient Servant

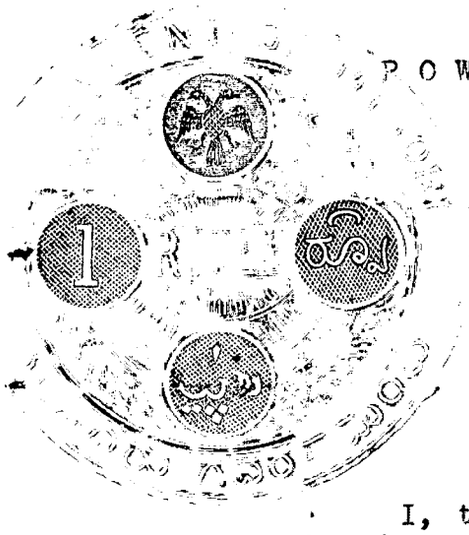
C. Chokkanna

Superintendent of Stamps
in Mysore.

a.v.f.m.

Sm 206-09-10
Sl 6.

8)



POWER OF ATTORNEY.

In the matter of the Inventions and Designs Regulations, 1894, of the Government of Mysore and in the matter of WILLIAM ARTHUR CALDECOTT, metallurgist, of Consolidated Gold Fields Buildings, Simmonds Street, Johannesburg, Transvaal, an Inventor.

I, the abovenamed William Arthur Caldecott, do hereby retain constitute and appoint

RUPERT REMFRY & HAMILTON GREEVES REMFRY, both of Hastings Street, Calcutta,

as my Agents and Attorneys to apply for and obtain from the Government of Mysore and keep in force an Exclusive Privilege or Letters Patent for Improvements in means for separating liquid from crushed ore products or other granular materials, and I authorise them to sign my name to such papers and writings and do such acts regarding the same, including the appointment of a substitute or substitutes, as may be necessary or expedient.

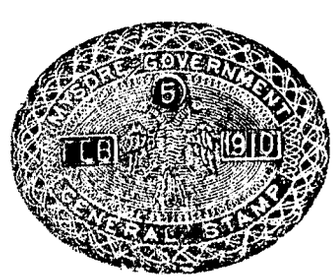
Dated this 26th day of November 1909

Signed, Sealed and delivered at Johannesburg, Transvaal, in the presence of:-

W. A. Caldecott

Chas. Ovendale
Registered Patent Agent,
Steytler's Buildings,
Johannesburg, Transvaal.

Maud Pope
Typist
Steytler's Buildings,
Johannesburg
Transvaal



G.R.S. 29A]

9

190

D 3171
4/2/10

From

Secy. to the Govt. of His Highness
The Maharaja of Mysore,
Genl. and Rev. Dept.

To

The Superintendent
of Stamps in
Mysore

Dated

Despatched 15-2-10

Received

General No. G. 4362

No. G. M. 206-08-7

ENCLOSURE NO.

Has the honor to acknowledge
the power of attorney duly
stamped and returned with
his letter No 146 dated the
5th inst.

1 B—O

2 Offs

C/Rs

For Offg Secy

Millard 1.2.10

GPB—10,000—9-4-06.

CV

D 3445 10)
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M. G. D. 13]

22 2 10

MYSORE GEOLOGICAL DEPARTMENT,

DATED BANGALORE, 21 st February 190 _

No. 1793.

Encls. one file

Epn 206/09-10
dl 8

From

DR. W. F. SMEETH, M.A., D.SC., A.R.S.M., etc.,
State Geologist in Mysore.

To

C.S. Balasundaram Iyer, Esquire, B.A.,
Offg. Secretary to the Government of His Highness the Maharaja of Mysore, Gen. & Rev. Depts.

SIR,

In reply to your docket No.G.4025/G...206-09-2, dated 3rd February 1910, forwarding for report an application for leave to file a specification of an invention for "Improvements in means for separating liquid from crushed ore - products or other granular materials", I have the honour to state that I have examined the same and am of opinion that the invention is novel and the claims legitimate The invention is likely to be of importance in the thickening of pulp which has been treated with a solvent prior to passing it on to the final filtering apparatus.

2. The leave applied for may in my opinion be granted.

3. The application and specification are returned herewith.

I have the honour to be
Sir,
Your most obedient servant,

W F Smeeth

State Geologist in Mysore.

C.N.

GPB—8-9-08—300

dm

No. G. 4567
G. W. 206-09-9

GOVERNMENT OF MYSORE

General Department.

Register No. 9 **of 190** 9-10

Bangalore, the 28-2-1910.

WHEREAS an application, dated the 26-11-1909 and received on the 17-1-1910, has been submitted under Section 5 of the Mysore Inventions and Designs Regulation, 1894, by Mr. William Arthur Caldecott, metallurgist of Consolidated Gold Fields Buildings, Simmonds Street, Johannesburg, Transvaal (hereinafter referred to as "the applicant") for leave to file a specification of an invention for "Improvements in means for separating liquid from crushed ore products or other granular materials"

And whereas the applicant has duly complied with all the requirements of Section 5 of the said Regulation;

The Government of Mysore are pleased, under Section 6 of the said Regulation, to authorize the applicant to file a specification of the said invention in accordance with the provisions of the said Regulation.

ORDERED, that the applicant be, and he is hereby, informed accordingly.

By Order of the Government of Mysore,

For Offg *Secretary to the Govt. of Mysore,*
Gen. and Rev. Depts.

Certified that the fees prescribed in the fourth schedule to the Mysore Inventions and Designs Regulation, 1894, in respect of the application for leave to file the said specification and of the filing thereof have been paid by the applicant, and that the specification hereinbefore described has been duly filed in accordance with the provisions of Section 8 of the said Regulation on this the fifth day of August 1910 ~~190~~.

For Offg *Secretary to the Govt. of Mysore,*
Gen. and Rev. Depts.

11)

(*Section 8 of the Inventions and Designs Regulation, 1894.*)

8. (1) If within six months from the date of an order under Section 6, Sub-Section (1), or within such further time, not exceeding three months, as the Government of Mysore, in its discretion, may, on cause shown to its satisfaction and on payment of the fee prescribed in that behalf in the fourth schedule, see fit to allow, the applicant causes a specification of his invention to be filed in manner by this Part required, and the fee prescribed in the fourth schedule in respect of the filing of the specification to be paid, the applicant shall, subject to the other provisions of this Part, be entitled to the exclusive privilege of making, selling and using the invention in the Territories of Mysore, and of authorizing others so to do, for a term of fourteen years from the date of the filing of the specification.

(2) But an exclusive privilege in respect of an invention of a new manufacture shall, notwithstanding anything in Sub-Section (1), cease, if the inventor fails to pay, within the time limited in that behalf by the fourth schedule, any fee prescribed in that schedule in respect of the continuance of the privilege.

(3) If, nevertheless, in any case, by accident, mistake, or inadvertence, an inventor fails to pay any such fee within the time so limited, he may apply to the Government of Mysore for an enlargement of the time for making the payment.

(4) Thereupon the Government of Mysore may enlarge the time accordingly, on payment of the fee prescribed in that behalf in the fourth schedule, and subject to the following conditions, namely :—

(*a*) the time for making a payment shall not in any case be enlarged for more than three months ; and

(*b*) if any suit is instituted in respect of an infringement of the exclusive privilege committed after a failure to make a payment within the time limited for the making thereof and before the enlargement of that time, the Court disposing of the suit may, if it thinks fit, refuse to award or give any damages in respect of the infringement.

GPB—500—7-4-09.

2 845

(2)

G.R.S. 26]

File No.

Serial No.

26/2/10

Diary No. of letter replied to 345

No. C. 4568 Enc. 1.

C. W. 206-09-10.

General and Revenue Secretariat

( )

, *the* 190

To

Messrs Remfry and Son

Solicitors and Patent Agents

Calcutta

Date of issue 28-2-10.

Signed by Rai C. Rangachariar Bahadur Sahib

Gentlemen,

With reference to your letter dated 10th January 1910 forwarding an application of Mr. William Arthur Caldecott, metallurgist, of Consolidated Gold Fields Buildings, Simmonds Street, Johannesburg, Transvaal for leave to file a specification in respect of an Invention for "Improvements in means for Separating Liquid from Crushed Ore Products

over.

SUBJECT.

Ore Dressing

26/p

13) of the granular materials."

I am directed to forward herewith an Order No G.4567 / G.M.206-09 dated 28-2-10. issued in the name of the applicant permitting him to file the specification referred to above and to request that the same may be communicated to the party concerned and an acknowledgment sent to this Office.

I have &c

Offg [illegible] 25/2

for Offg Secy

JS.

* Invention Register No 9 of 1909-10.

List of enclosures,

Copied by

Examined by

GPB—10,000—23-5-08

C1

E.M. 2060/09-10
K 11

14
D 592
5

Specification.

To THE SECRETARY TO THE GOVERNMENT OF MYSORE,
~~THE PATENT SECRETARY,~~ Genl & Rev. Depts.
~~PATENT OFFICE,~~ BANGALORE,
~~CALCUTTA.~~ Mysore.

FROM

REMFRY & SON,

SOLICITORS AND PATENT AGENTS,

CALCUTTA.

Dated CALCUTTA, the 2nd August 1910.

Sir,

Pursuant to the Leave granted on Application Register No. 9 of 1909-10 by Order dated 28th February 1910 we have the honour to forward herewith four ~~six~~ copies of the specification of WILLIAM ARTHUR CALDECOTT, Metallurgist of Consolidated Gold Fields Buildings, Simmonds Street, Johannesburg, Transvaal,

in respect of an Invention for "IMPROVEMENTS IN MEANS FOR SEPARATING LIQUID FROM CRUSHED ORE PRODUCTS OR OTHER GRANULAR MATERIALS"

The prescribed Fee of Rs.* 30 and the Original of the said Order are also sent herewith, and we solicit the favour of your returning such Order after completing and signing the Certificate at foot thereof, and entering our office in Calcutta as the address for service under ~~Section 13 of~~ the Act.

*P.O.O.

We have the honour to be,

Sir,

Your very obedient servants,

REMFRY & SON.

500—21-11-'08.

[To the ... must be accompanied by this ... name and address for the information of the Payee.]

Amount of Order Rs. 60/- As.

Name of Remitter Remfry & Son.

Mysore Specifications
Rock Drill 10/09-10
&
Caldecott 9/09-10.

see Letters under
Registered cover.

REMFRY & SON.

157

206 of 09-10 16

SECRETARY'S OFFICE
RECD. NO .....
23 MAR. 1910
MYSORE P. W. DEPT.

APPLICATION

TO THE DEWAN OF MYSORE.

The Application of WILLIAM ARTHUR CALDECOTT, Metallurgist, of Consolidated Gold Fields Buildings, Simmonds Street, Johannesburg, Transvaal, for leave to file a Specification under Part I of the Mysore Inventions and Designs Regulations, 1894.

1. The Applicant is in possession of an Invention for Improvements in means for separating liquid from crushed ore products or other granular materials; he is the Inventor thereof; and, to the best of his information and belief, the Invention is new within the meaning of Part 1 of the Inventions and Designs Act, 1888, and no circumstance exists which, if the Applicant is authorised to file a Specification and files it in accordance with that Part, will disentitle him to an Exclusive Privilege thereunder in respect of the Invention.

The Applicant has not applied for a Patent in the United Kingdom in respect of this Invention.

2. The following is a description of the Invention:-

SOLICITORS & PATENT AGENTS
REMFRY & SON.
CALCUTTA.

/

(7)

This invention relates to means primarily intended for separating crushed ore products from liquid, e.g., water, cyanide or other solvent solution or wash water. It is also applicable for separating other granular material from liquids. The invention is applicable for use in the treatment of either class of crushed ore products, sands or slimes -or mixtures thereof, and for either intermittent or continuous operation.

With the means at present in use for separating liquid from such products, holes or passages form through the mass of solids in the separating vessel, resulting in sudden rushes of the liquid through the outlet aperture for the solids provided in the bottom of the vessel.

The object of my present invention is to obviate this and to secure a constant thick underflow from the vessel, by providing means which will prevent the formation of such holes or passages through the settled mass.

The invention may be utilized in Spitzkasten or similar conical classifiers, or in tanks, vats, or receptacles of other shape, employed for the treatment of crushed ore products.

The invention consists essentially in the employment of one or a plurality of diaphragms positioned inside the vessel below the normal level of the mass of settled material, and constructed or arranged to provide either between its circumference and the internal walls of the vessel or through it, or both round its circumference and through it, passages through which the settled solids are compelled to pass on their way to the outlet at the bottom of the vessel. Obviously the invention may take a large variety of forms.

(8)

In one form it may be constructed as a plane horizontal disc serrated or notched circumferentially and perforated over the whole or any suitable portion or of its surface; or it may assume the form of a curved plate or cone so arranged inside the vessel as to provide the passages for the solids between its rim or periphery and the walls of the vessel.

In the accompanying drawings I illustrate alternative forms of my invention.

In the several figures of the drawings like letters indicate the same or corresponding parts in so far as they apply.

In the drawings

Fig. 1 illustrates in sectional elevation, the invention as applied to an ordinary conical classifier or inverted conical vessel such as is commonly employed in the treatment of auriferous ores for removing the bulk of the liquid from mixtures of liquid and crushed ore products.

Fig. 2 is a plan of figure 1.

Fig. 3 shows the adaptation of the invention to another common type of tank or vat.

Fig. 4 is a plan of a tank as shewn in figure 3 illustrating the employment of one perforated diaphragm.

Fig. 5 is a view similar to figure 1 illustrating certain alternative forms of the invention.

Fig. 6 is a plan view of figure 5.

Fig. 7 is an elevation of that form of the diaphragm illustrated in full lines in figure 5, detached.

Fig. 8 is an elevation of the hemi-spherical form of diaphragm illustrated in dotted lines in figure 5, detached.

Fig. 9 is an elevation of the conical form of the invention also, illustrated in dotted line in figure 5, detached.

Referring more particularly to the arrangement illustrated in figures 1 and 2, 1 represents an inverted conical vessel into the top of which the mixture of crushed ore products and liquid is introduced through the medium of the vertical inlet pipe 2 which may, as is usual, be arranged to discharge the mixture on to or above a baffle plate 3 in order the more effectually to distribute the mixture within the vessel.

The vessel 1 will ordinarily be provided with the usual rim launder 4 surrounding its upper edge to receive the overflow. 4a represents the outlet or discharge spout by which the overflow passes from the launder 4. The vessel 1 at its truncated lower end is equipped with any suitable means for withdrawing the settled solids. The dotted line 5 in figure 1 represents the normal level of the settled solids.

At a suitable point or points below the normal level 5 I arrange one or more of the diaphragms 6. As illustrated in these figures it takes the form of a circumferentially serrated or notched disc. The peripheral indentations or serrations 7 constitute the passages through which the settled solids pass on their way to the outlet 8 at the bottom of the vessel. Instead of employing one serrated diaphragm 6 as shewn a plurality may be employed and if desired instead of or in addition to serrating the diaphragm or diaphragms circumferentially it or they may also be perforated preferably at or in proximity to the periphery.

In figure 3 I illustrate the adaptation of my invention to that form of tank 9 which is cylindrical for

the greater portion of its height and of inverted conical form in its lower portion. In this case the pulp or mixture of liquid and crushed ore products may be introduced into the vessel by means of the inlet pipe 10 and distributing baffle 11, the settled solids being withdrawn through the discharge aperture 12 in the bottom of the vessel 9 and the overflow being received by the annular rim launder 13 constructed with discharge spout 13a. In this figure the vessel is shewn provided with two perforated diaphragms 14 the perforations or apertures 15 in this case constituting the passages through which the settled solids pass to the outlet 12. The diaphragms 14 are arranged a suitable distance apart, one above the other and both at some distance below the normal level (indicated by the dotted line 16) of the settled solids. In this type the diaphragm or diaphragms may also be circumferentially notched if desired.

In figure 4 a vessel 17 of the configuration shewn in figure 3 is illustrated provided with one of the perforated diaphragms 18. For the type of vessel illustrated more particularly in figures 3 and 4 the apertures or perforations 15, 19, formed in the diaphragm or diaphragms 14, 18, are preferably uniformly distributed over the whole area thereof so that each of said perforations or apertures serves a more or less equal area.

In figure 5 I show three other alternative forms of the diaphragm.

With each of these forms the passages are formed between the circumference or rim of the diaphragm and

the walls of the vessel.

In the one form shewn in full lines in figure 5 and detached in figure 7 the diaphragm 20 is in the form of a convex plate provided with lugs or projections 21 which serve for securing it in the desired position in the vessel by means of the crossed pieces of timber 22 which, as shewn in figure 5, rest on the inside of the vessel. In the modification shewn in dotted lines in figure 5 and detached in figure 8 the diaphragm assumes the form of a hemisphere 23 having lugs 24 for securing it to the cross 22.

In the further modification also illustrated in dotted lines in figure 5 and detached in figure 9 the diaphragm takes the form of a cone 25 constructed with lugs or projections 26 for fixing it on the top of the cross 22. Any of the forms of the diaphragm shewn in figures 5 to 9 may if desired be constructed with circumferential indentations.

The construction of the vessel is the same as that described in connection with figures 1 and 2 and the same letters are used to indicate the same parts.

Having now particularly described and ascertained the nature of my said Invention and in what manner the same is to be performed, I declare that what I claim is

1. In means for separating liquids from crushed ore products, a vessel having an outlet aperture in the bottmm thereof and means arranged in said vessel below the normal level of the mass of settled solids which prevent the formation of passages through said mass and permit the settled solids to fall to the outlet aperture, substantially as described.

2. In means for separating liquids from crushed ore products, a vessel for receiving the mixture of solids

and liquid, said vessel having an outlet in the bottom and means arranged in said vessel below the normal level of the mass of settled solids which prevent the formation of passages through said mass, said means providing passages between it and the vessel which permit the settled solids to fall to the outlet in the vessel substantially as described.

3. In means for separating liquids from crushed ore products, a vessel for receiving the mixture of solids and liquid, said vessel having an outlet in the bottom and means arranged in said vessel below the normal level of the mass of settled solids for preventing the formation of passages through said mass, said means having a serrated edge through the serrations in which the settled solids pass to the outlet in the vessel, substantially as described.

4. In means for separating liquids from crushed ore products, a vessel for receiving the mixture of solids and liquid, said vessel having an outlet in the bottom, and means in said vessel below the normal level of the mass of settled solids for preventing

the formation of passages through said mass, said means fitting the walls of the vessel and having holes there - through which permit the settled solids to pass to the outlet in the vessel substantially as described.

5. The various specific forms of the invention, s ubstantially a s hereinbefore described in connection with and as illustrated in the several figur es of the accompanying drawings.

3. The Applicant, therefore, applies for leave to file a Specification of the Invention pursuant to Part 1 of the Inventions and Designs Act, 1888.

W. A. Caldecott

I, the Applicant abovenamed, do declare that the facts stated in this Application are true to my knowledge, except as to matters stated on information and belief and as to those matters I believe them to be true.

Dated this 26th day of November, 1909.

W. A. Caldecott

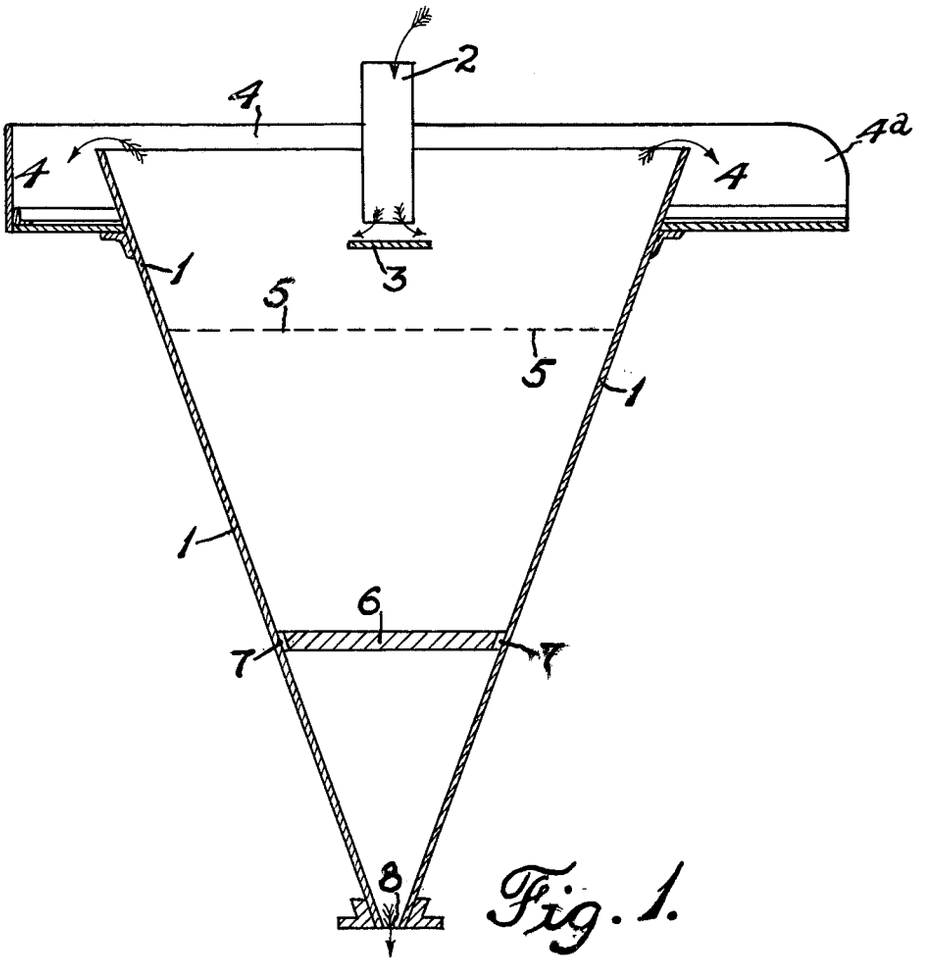

Fig. 1.

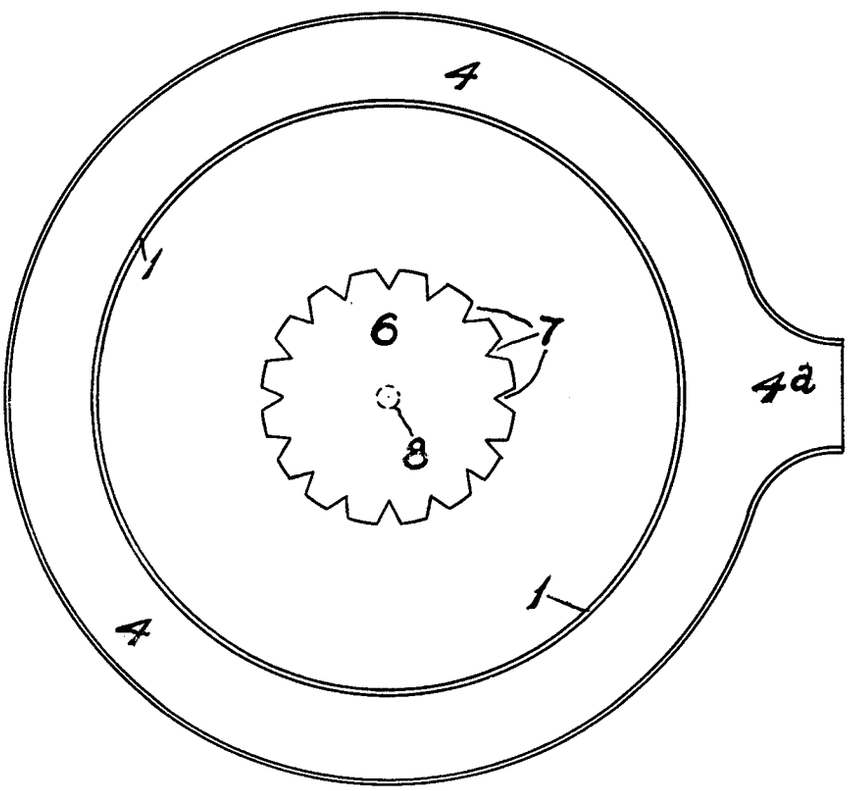

Fig. 2.

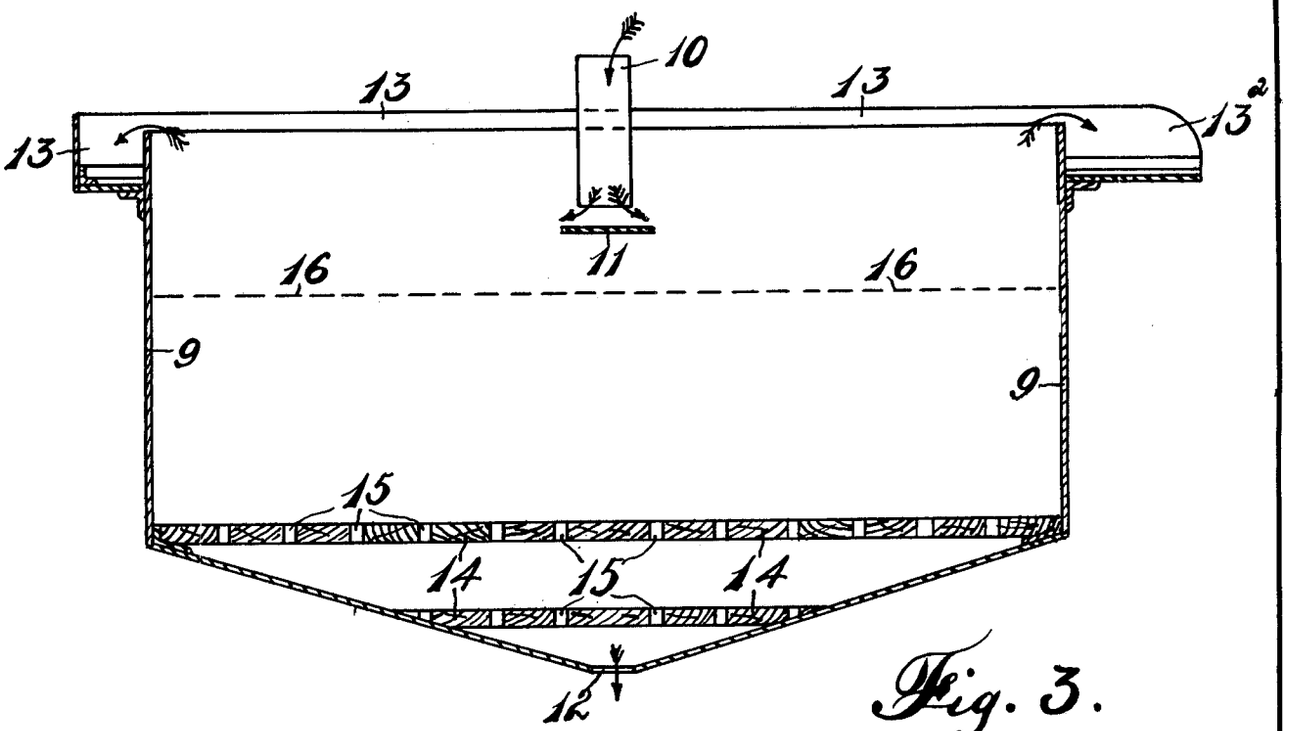
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Fig. 3.

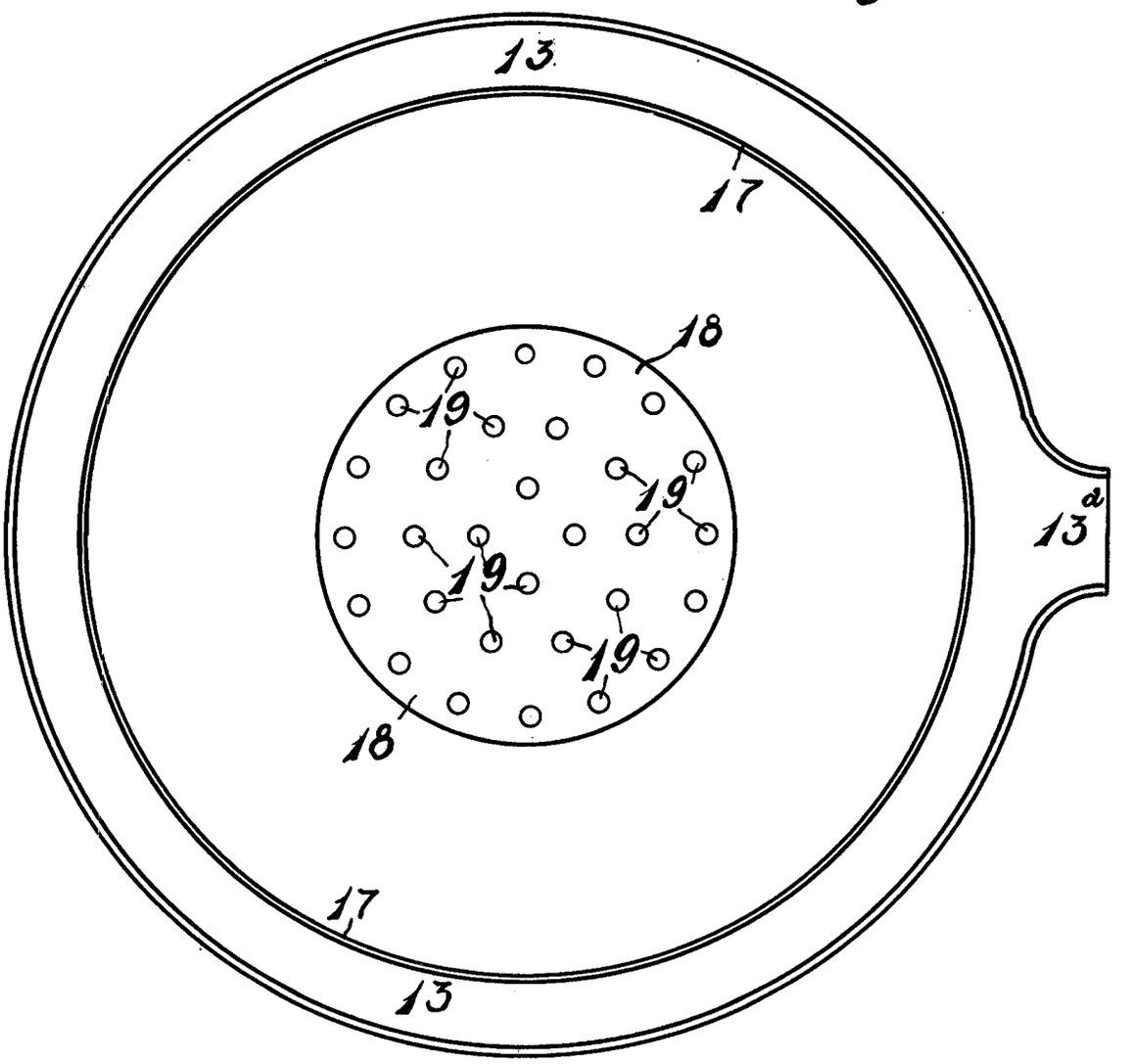
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Fig. 4.

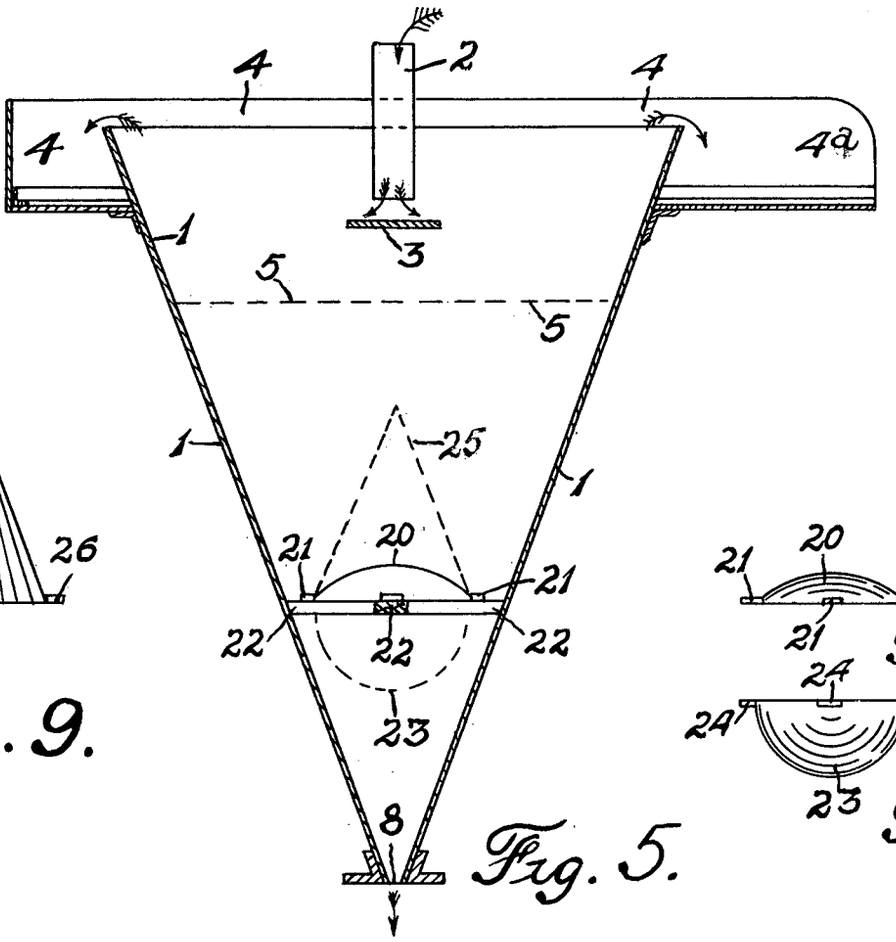

Fig. 5.

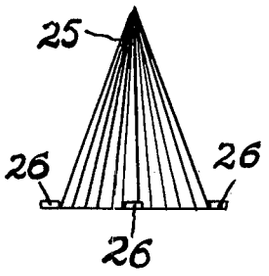

Fig. 9.

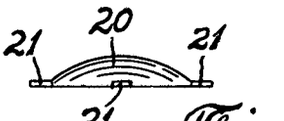

Fig. 7.

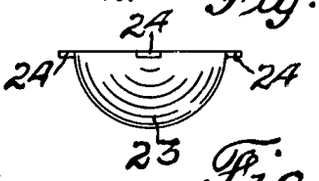

Fig. 8.

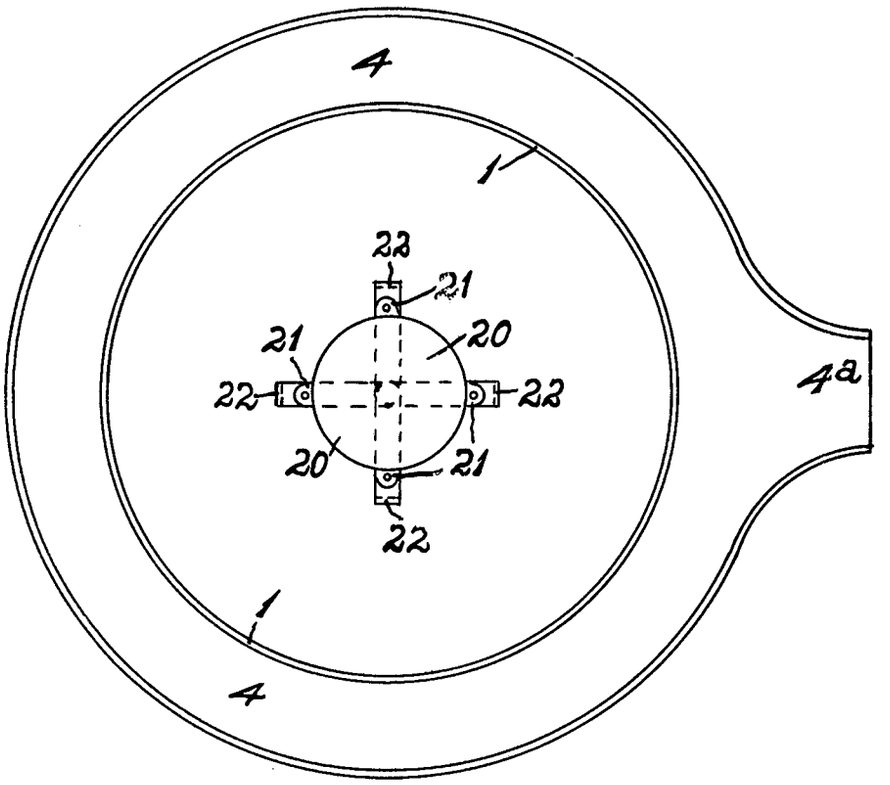

Fig. 6.

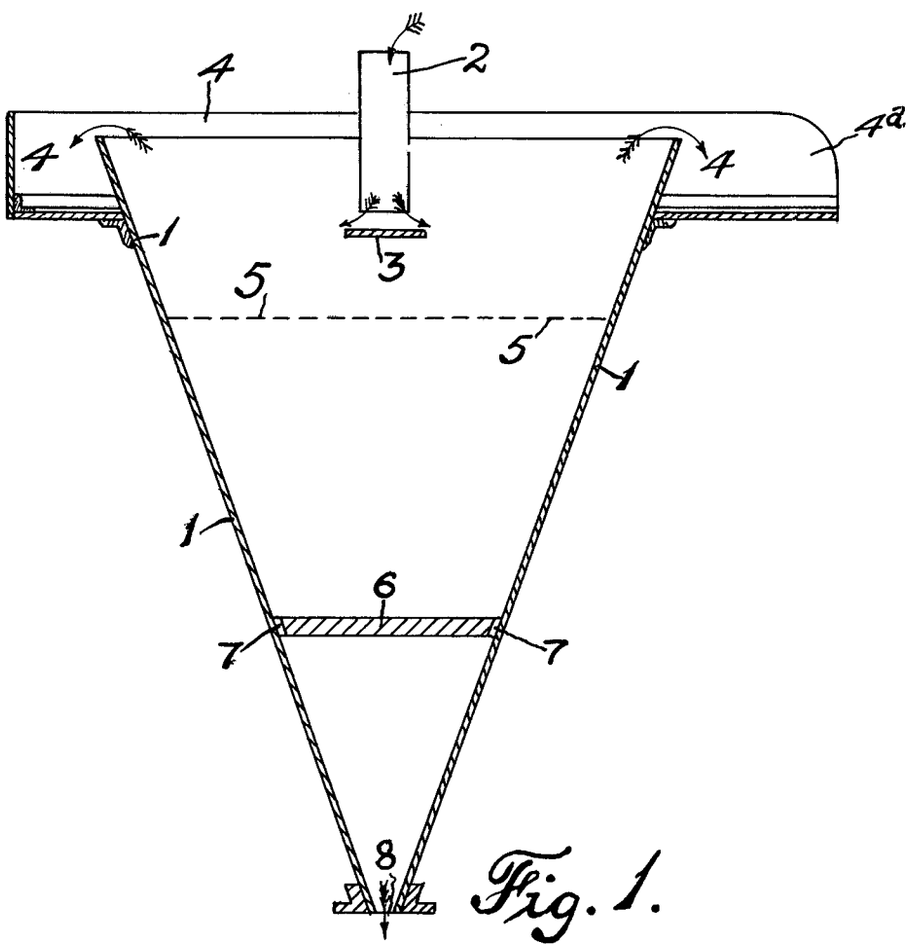

Fig. 1.

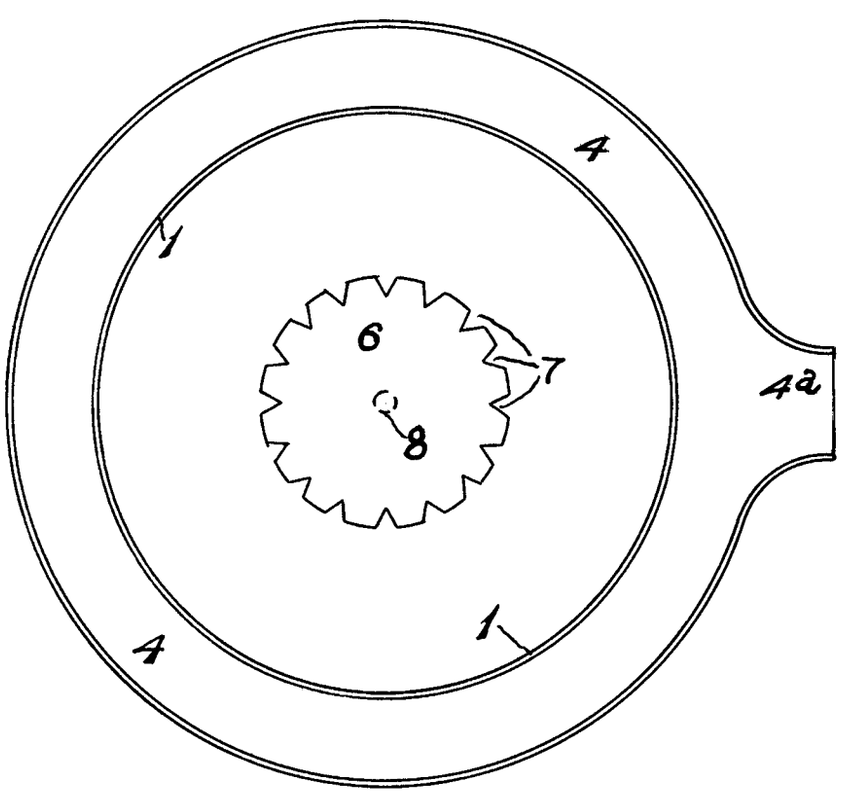

Fig. 2.

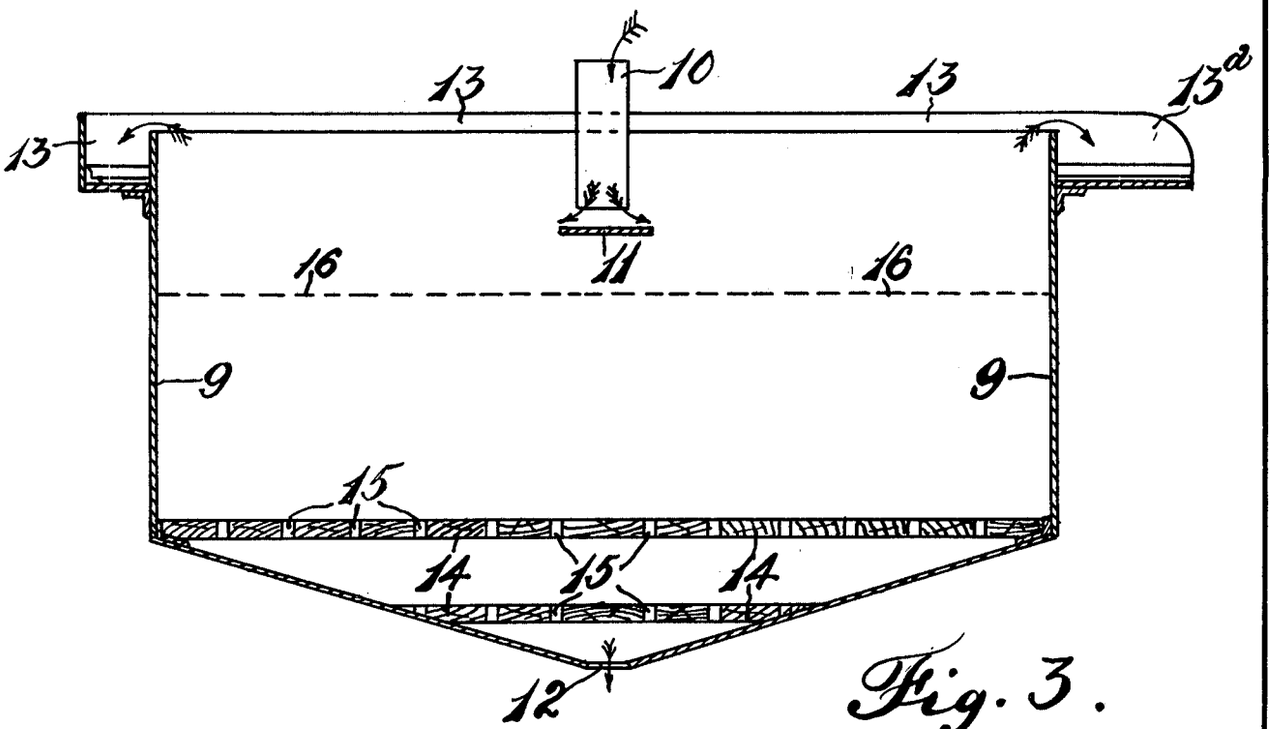
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Fig. 3.

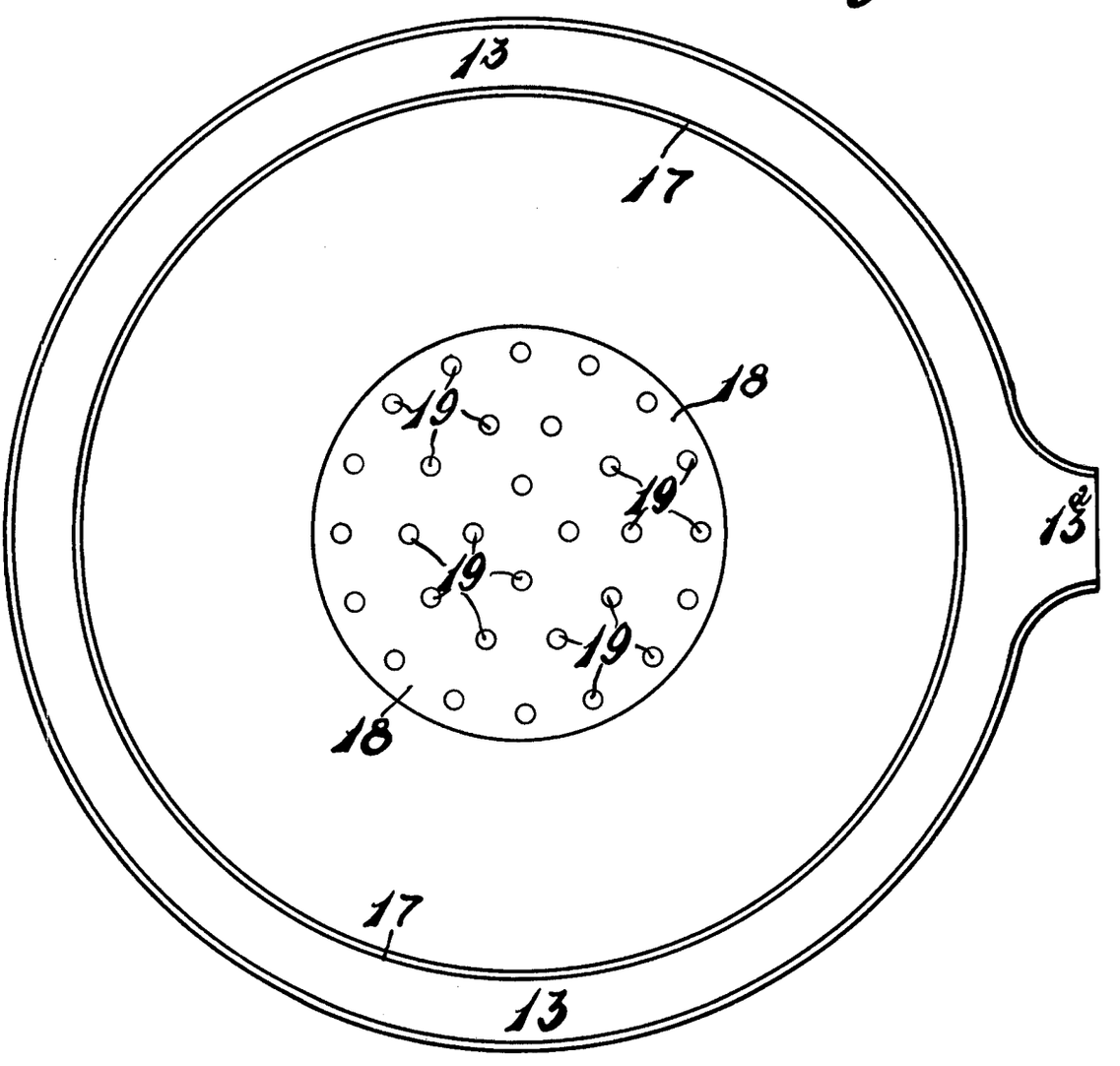
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Fig. 4.

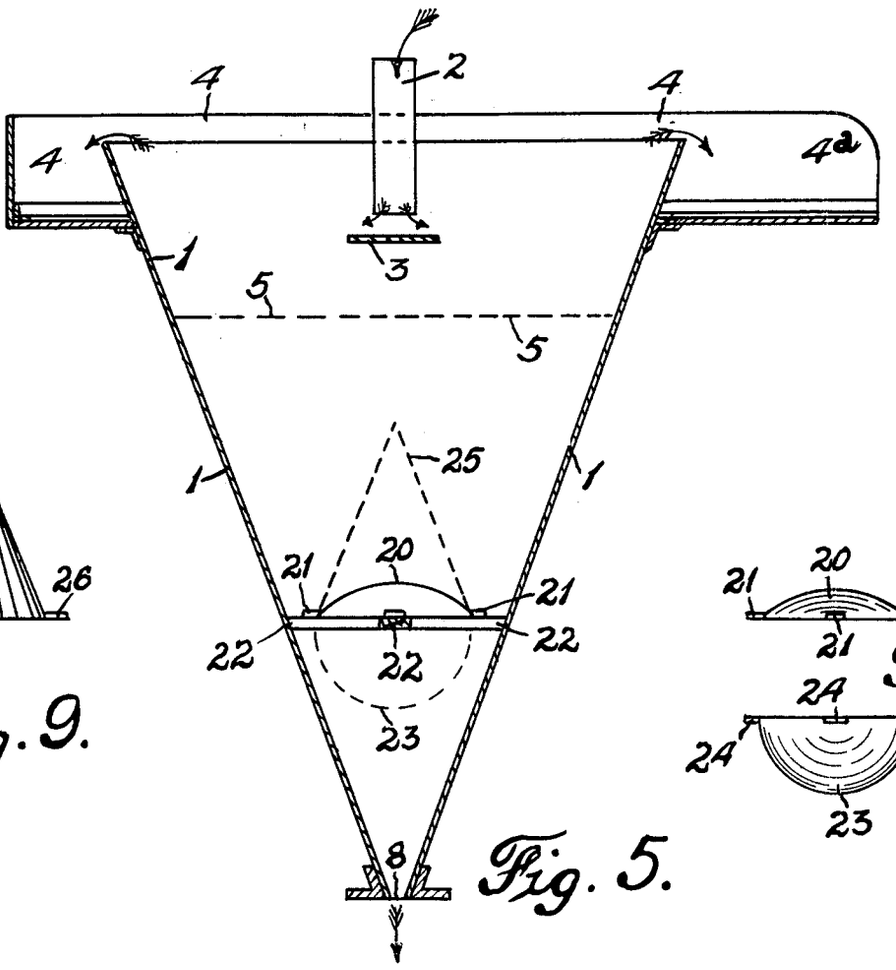

Fig. 5.

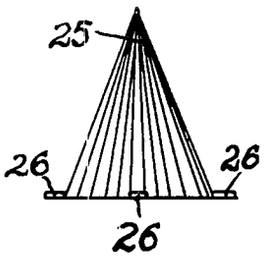

Fig. 9.

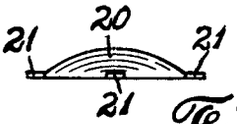

Fig. 7.

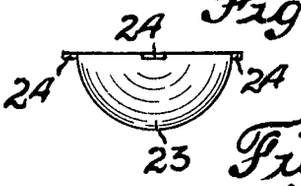

Fig. 8.

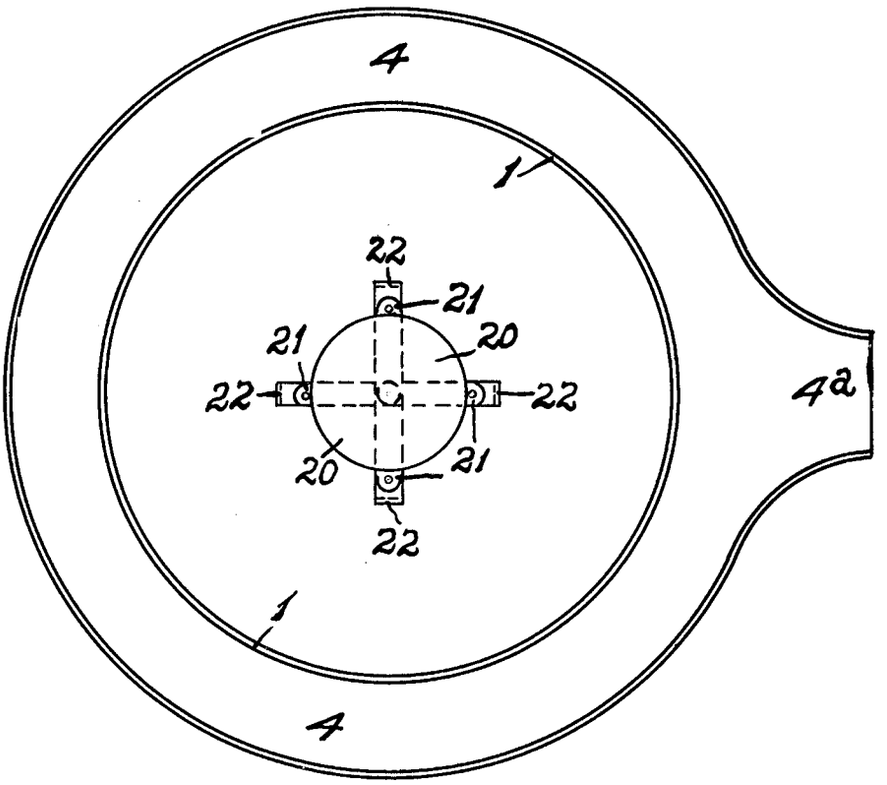

Fig. 6.

4 2 8 8/8/10 32

2 Cal. 11

No. G. 985
G.M.-206-09-12

MYSORE GOVT. GEN. & REV. SECRETARIAT,
Dated Bangalore, 15-8 1910.

NOTIFICATION.

(PATENT.)

The following specification of an invention has been filed in accordance with Sections 8, 9, 10 and 11 of Regulation XI of 1894 (The Inventions and Designs Regulations) and is open to inspection at the Mysore Government Secretariat on application to the Secretary to the Government of His Highness the Maharaja of Mysore, General and Revenue Departments, and on payment of a fee of one Rupee.

By Mr William Arthur Caldecott, metallurgist of Consolidated Gold Fields Buildings, Simmonds Street, Johannesburg, Transvaal.

"Improvements in means for separating liquids from crushed ore products or other granular materials."

By Order,

878/10

For Secy. Secretary.

To

The Compiler, *Mysore Gazette*, for publication

4 8/8/10 84

No. 4966
G.M. 208 of 13.

MYSORE GOVT. GEN. & REV. SECRETARIAT,

Dated Bangalore, 15-8- 1910.

From

The Secretary to the Government of H. H. the Maharaja of Mysore,
General and Revenue Departments.

To

Messrs Remfry and Son
Solicitors and Patent Agents
Calcutta

Gentlemen,
~~Sir,~~

With reference to your letter dated 12th 2nd August 10, I am directed to forward copy of a Notification No. dated issued by this Government in regard to the invention filed by you under Regulation XI of 1894 (The Inventions and Designs Regulations.)

The order granting permission to file specification is herewith returned, with the certificate at foot, duly filled in and signed. for being communicated to the party concerned.

I have the honor to be,
~~Sir,~~ Gentlemen
Your most obedient servant,

8/8/10
Secretary.

G.R.S. 29A]

190

From

Secy. to the Govt. of His Highness The Maharaja of Mysore, Genl. and Rev. Dept.

To

The Officer in charge of State Engagements,

Dated

Despatched 15-8-10

Received

General No. G. 967

G. Mis No. 206-09-14.

Enclosure No. Rs 30.

Has the honor to remit herewith Rs 30 (thirty only) being the fee paid by messrs Remfry & Son, Solicitors and Patent Agents of Calcutta for filing a specification in respect of an invention for "Improvements in means for separating lepus from crushed ore

GPB—10,000—9-4-06.

products or other granular materials" and to request the favor of an acknowledgment.

By order

DFB

for 8/8/10

Fred'k Seely

592 L 8 15 8/8/10 87

3 Copies

G.R.S. 29A]

190

From

Secy. to the Govt. of His Highness
The Maharaja of Mysore,
Genl. and Rev. Dept.

To
1) The State Geologist
2) The Chief Engineer
Dated 3) The Supt. Govt. Museum
Despatched 15-8-10
Received
General No. G. 968-70
G. M. No. 206-09-15
ENCLOSURE No. one (Bearer).

Has the honor to forward for being filed in his Office a Copy of the Specification in respect of an invention for "Improvements in means for separating Copper from crushed ore products or other granular materials"

Dr. 10/8

GPB—10,000—9-4-06.

38

Filed by messrs Rempfy & Son
of Calcutta on behalf of
Mr William Arthur,
Calcedt Metallurgist
of Consolidated Gold Fields
Buildings, Simmonds
Street, Johannesburg
Transvaal and to
the favor of
request an acknowledgment

By order

Mr 8/8/10.

Frobbgley

VS

27

No 46 V 1818 CS to 965 D 845 Rs 30/-

Gm 206-09-16.5

Received From the Secretary to the Government of His Highness the Maharaja of Mysore General & Revenue Dept.

the sum of Rupees Thirty only and credited this day to XIX Miscellaneous E Miscellaneous 7 other items vide his No 9967 Gm 206-09-14 dated 15th august 1960.

H. H. The Maharaja's State Huzur Treasury,
Bangalore, the 17th august 1960

~~By Order~~,

Exd.

Hd. Accott.

~~Bakshi.~~ Treasurer

Treasury Officer, State Huzur Treasury.

M.G.D. 13]

MYSORE GEOLOGICAL DEPARTMENT,

Dated Bangalore, 22 August *1910*.

No. 324 Gen. 206-09-17

From

DR. W. F. SMEETH, M.A., D.SC., &C.,

State Geologist in Mysore.

To

C.S. Balasundaram Iyer, Esquire, B.A.,

Offg.Secretary to the Government of His Highness the Maharaja of Mysore,Gen.& Rev.Dept

SIR,

I have the honour to acknowledge the receipt of a copy of the specification forwarded with your docket No.G. 968-70/Gen.206-09-15, dated 15th August 1910, in respect of an invention for "Improvements in means for separating liquid from crushed ore products or other granular materials" filed by Messrs. Remfry & Son of Calcutta on behalf of Mr. William Arthur Caldecott, Metallurgist, of consolidated Gold Fields Buildings, Simmonds Street, Johannesburg,Transvaal.

I have the honour to be,

Sir,

Your most obedient servant,

K. Balasundaram

for State Geologist in Mysore.

C.M.

GBP.--250--14-5-10

V 298 M5 4/925 5.

1910—11.

From

G. H. KRUMBIEGEL, Esq., F.R.H.S.,
Economic Botanist,
Supt., Mysore Govt. Museum,
Bangalore.

To C. S. Balasundaram Iyengar B.A.,
Offg. Secretary to the Govt. of
H. H. the Maharaja of Mysore,
General & Revenue Departments,
Bangalore.

Gen 2006-09-18

Dated 24th August, 1910.

Despatched

Received

General No. 60

No.

Enclosure No.

Acknowledging the receipt of a Copy of the Specification of an invention for "Improvements in means for Separating liquid from crushed ore products or other granular materials" filed by Messrs: Remfry and Son, Calcutta

——— :. O :. ———

GPB—300—15.7.10

42

No. 60

OFFICE OF THE ECONOMIC BOTANIST,
SUPERINTENDENT, MYSORE GOVERNMENT MUSEUM,
Bangalore, dated 24th August 1910.

FROM

G. H. KRUMBIEGEL, ESQ., F.R.H.S.,
Economic Botanist,
Superintendent, Mysore Govt. Museum,
Bangalore.

To C. S. Balasundaram Iyer, Esqr. B.A.,
Offg. Secretary to the Govt., of H. H. the
Maharaja of Mysore, Genl. & Rev. Depts.,
Bangalore

Sir,

I have the honor to acknowledge the receipt of a Copy of the Specification of an invention for "Improvements in means for Separating Liquid from Crushed Ore products or other granular Materials" filed by Messrs: Remfry & Son, Calcutta — forwarded with Your No. G. 968-70/Gen. 206-09-15 of the 15th August 1910

I have the honor to be,

Sir,

Your most obedient Servant,

G. H. Krumbiegel

Economic Botanist,
Supt., Mysore Govt., Museum.

M.

592

692 — 1079

1900-11.

From

THE CHIEF ENGINEER OF MYSORE,
BANGALORE.

To The Secretary to Govt. of Mysore
General & Rev. Departments,
Bangalore

Gen 206-09-19

Dated Bangalore, 31st August 1910.

Despatched

Received

General No. 757.
No.

Enclosure No.

Acknowledging the receipt of a copy of the Specification in respect of an invention for Improvements in the Means for separating liquid from Crushed ore products or other granular Materials" — filed by Messrs Remfry & Son of Calcutta, forwarded with — Dr. No. G. 966-70/G. dt. 206-09/75 dated 15-8-1910

45

No. 7576

Gen 206-09-19.

MYSORE P. W. DEPARTMENT,
CENTRAL OFFICE.
Bangalore,.....31st..August.....*19*10.

From

M. VISVESVARAYA, Esq., M.I.C.E.,
Chief Engineer of Mysore,
Bangalore.

To

C.S.Balasundaram Iyer,Esq., B.A.,
Offg. Secretary to the Government of
His Highness the Maharaja of Mysore,
General and Revenue Departments, Bangalore.

SIR,

I have the honour to acknowledge the receipt of a copy of the specification in respect of an invention for "Improvements in means for separating liquid from crushed ore products or other - - granular materials" filed by Messrs. Remfry and Son of Calcutta, - Johannesburg, Metallurgist of consolidated Gold Fields Buildings, and forwarded with your No. G.968-70/G.M.206-09-15 dated the 15th instant.

I have the honour to be,
Sir,
your most obedient servant,

Deputy Chief Engineer,
Mysore P.W.Department.

S.S.

44

19

MYSORE. P. W. DEPARTMENT.

No.

From.

THE CHIEF ENGINEER OF MYSORE,
Bangalore.

To

Dated Bangalore,

Despatched

Enclosure No

SUBJECT.

GPB—500—19-8-10

legitimate says leave to file
the specification may be granted.

9. G.G. No. G. 4567 dated 28.2.10.
Grants leave to file the specification in Sl. 1.

10. To Messrs Remfry & Sons
No. G. 4568 dated 28.2.10.
Forwards a copy of Sl. 9. to be communicated
to the party concerned.

11. From Messrs. Remfry & Sons.
letter dated 2.8.10.
Files the specification referred to &
forwards 4 copies with a fee of Rs 30/-

12. To the Compiler Mysore Gazette
No. G. 965 dated 15.8.10.
Notifies the filing of the specification.

13. To Messrs. Remfry & Sons.
No. G. 966 dated 16.8.10.
Forwards a copy of Sl. 13 and returns,
~~Sl. 7~~ Sl. 7 duly cancelled at Post Office

14. To Officer in charge of S. H. Trg.
Remits Rs 30 noted with Sl 10 & acknowledges

15. To the State Geologist
the Chief Engineer &
the Supdt. Govt. Museum.
No. G. 968-70 of 15.8.10.
Forwards each a copy of the specification

16. From the officer in charge of P. H. Trg
No. 46 dated 7th Aug. 1910.
Acknowledges the receipt of As 30 sent with Sl. 14

17. From the State Geologist Mi Myo
No 324 dated 22 Nov 1910
Acknowledges the receipt of the copy of the Specifi-
cation sent with Sl. 15.

18. From the Supdt Govt Observatory
No 60. dated 24th Aug 1910.

Acknowledges the receipt of the copy
of Specification sent with Sl. 15.

19. From the Chief Engineer.
No 7576 dated 31st Aug 1910
Acknowledges the receipt of a copy of
the Specification sent with Sl. 15.